



Datenknecht

2017 was the first time I had read about the IPFS project on the Internet. For testing I had installed a small Asus netbook with the software and let it run for some time. The website could be accessed very quickly, but with every update it took me almost an hour because the hardware really sucked. The project was taken offline again and disappeared back into one of my countless drawers. Nevertheless, I was still fascinated by the idea because it offers so many advantages. With IPFS you can limit the influence of unauthorized persons and the loading times are faster than with HTTP. I can also manage my data myself, have more storage space available (1TB for the beginning) and I am no longer dependent on my hoster's data silo. Of course, it will cost more power and time and I have to take care of the security of the data, but it would be worth it.

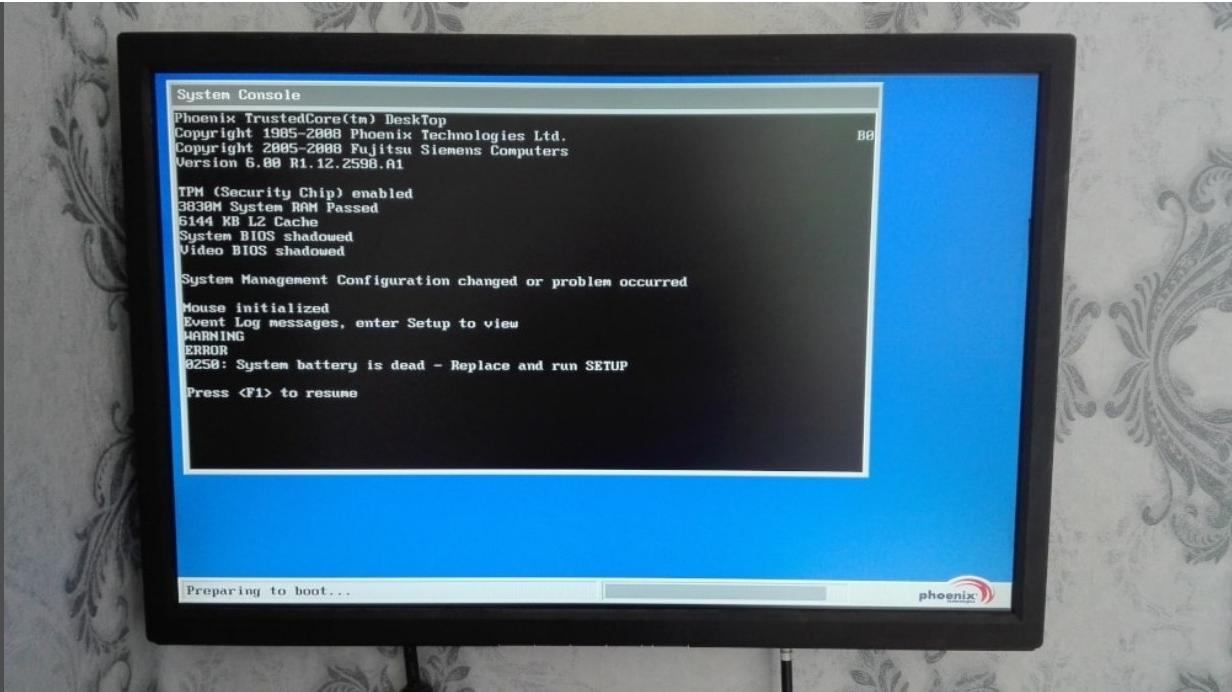


Last month I got an [ESPRIMO E5925 computer](#) and got it up and running again. The BIOS battery had to be replaced and a new hard disk inserted. With 2GB RAM the computer is also strong enough to function as a server. The design of the paintwork was based on the 60-70'. The name *Datenknecht* consists of Daten (data) and Knecht (farmhand) and comes from my roommate. A server does nothing else but manage data. Altogether there will be some documentation about the project, because I have to set up a generic Linux server system in the next weeks. After that, IPFS will be set up and security will be taken care of. All this takes time, because unfortunately I can only work on weekends or in my spare time.

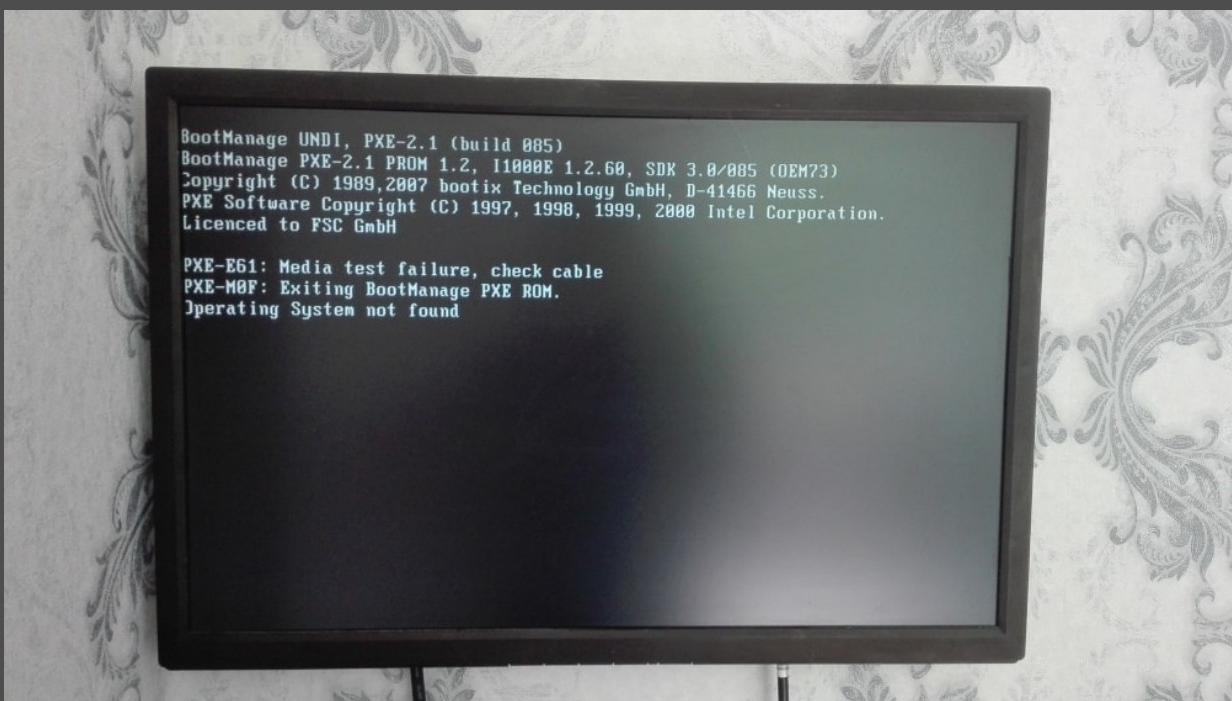


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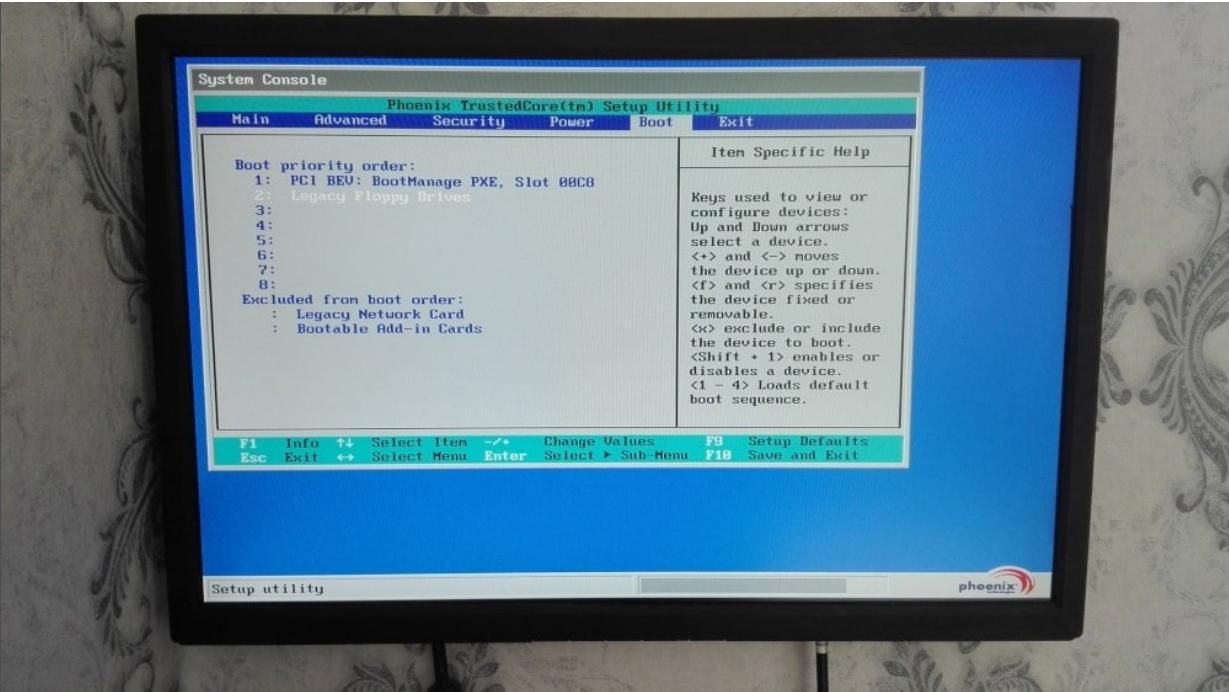
After I had repainted and cleaned the server last week, I set myself today to bring this with a backup hard disk to run. I was thinking about writing a summary here in this article and if I change e.g. the hardware to create a project file. Since there were no special occurrences here, you don't have to reproduce everything one to one. I will only make small remarks about small problems I have encountered.



As I wrote before, the old BIOS battery had already been replaced by a new one. Nevertheless, the system showed me the opposite (2 beeps). I had to try a little until I found the error. Since I had no one else at hand, I used a keyboard with a PS/2 connector. The hardware couldn't handle it and that didn't want to change in the BIOS either. Since I didn't want to get too excited about the problem, I simply borrowed a USB keyboard from my roommate at short notice and connected it. The problem was no longer there. ^\(^)/^



I first connected a hard disk to the internal system. But it could not be found there and caused the [PXE-E61: media test failure check cable](#) and [PXE-M0F: exiting bootmanager PXE rom error](#). This could be solved in a few minutes by changing the BIOS settings. The system should no longer boot from the network or floppy disk. I simply connected the external hard disk from the outside with USB and created an additional power plug. I am considering to install all this in the hardware, because this hard disk (1TB) has to suffice for now.



After the settings were adjusted, Linux Mint could start normally. I tested the performance of the server a little bit and there is still a lot to do. I will have to buy additional hardware. I still have a broken USB keyboard here that I can repair. Mouse is still lying around in the closet somewhere. I need two more 2GB RAM bars. Since I also want to rebuild the case, I certainly need components for it, but I should still have them all here. A WLAN stick, because I can't run RJ45 here and our router only has one connector for network cables anyway. Maybe I can find a better solution because WLAN seems too insecure for a server. Everything else is going according to plan. The difficult problems won't come until later. I'm pretty sure about that.



Break Things

I described in the article [how to fail](#) what happened to me with the computer cover. Sometimes you have to accept a heavy setback and try to repair the rest. Unfortunately this didn't work. At some point I had so many primer layers on the plastic that the shape changed and no longer corresponded to the original. Of course this is a pity and I thought about sanding everything down again, but then decided differently. I learned in a very hard lesson that sometimes it is better to rebuild a part completely and then throw the old one away. Of course it's not an original anymore, but I don't intend to sell the server either. I was also bothered by the CD drive, which I really don't need anymore because everything is done via USB. Also the two sockets for the headphones and the microphone are not needed. Some cables are to be installed inside the computer and maybe some orange LEDs could be used. Only the right side with the fan and the on/off button I want to keep, because I like this side very much. I have concrete plans in the drawer and have to see how I can best implement them, because I do not want to afford such a mistake as the first time. That costs too much time and money.